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Notice of Allowability	Application No.	Applicant(s)	
	10/719,592	VANDENBERG, JOSEPH	
	Examiner	Art Unit	
	Jerry T. Rahll	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application received 21 November 2003.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

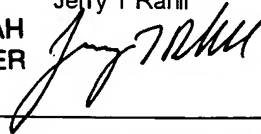
5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none">1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none">5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____7. <input type="checkbox"/> Examiner's Amendment/Comment8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance9. <input type="checkbox"/> Other _____ |
|---|--|


AKM ENAYET ULLAH
PRIMARY EXAMINER

Jerry T Rahll



DETAILED ACTION

Drawings

1. The drawings are objected to because the he lines and labeling are not clear and uniform. The drawing appears to be a rough hand-drawn sketch. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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3. Claims 1-17 are allowed. Claims 1-17 describe an optical component alignment apparatus including a supporting substrate having a component mounting surface, a thermally conductive material positioned on first area of the component mounting surface, an optoelectronic component positioned on the thermally conductive material, the optoelectronic component defining an optical axis substantially parallel the component mounting surface, a conductive layer positioned on the component mounting surface adjacent the thermally conductive material, a dielectric layer formed on the conductive layer, where the conductive layer and the dielectric layer define a bondline thickness, and an optical block fixedly positioned on the dielectric layer, defining an optical axis substantially parallel with the component mounting surface and the bondline thickness selected to align the optical axis of the optical block to the optical axis of the optoelectronic component.
4. U.S. Patent No. 6,713,862 to Palanisamy et al. describes an optical component alignment apparatus (99) including a supporting substrate (100) having a component mounting surface, a thermally conductive material (102) positioned on first area of the component mounting surface, an optoelectronic component (104) positioned on the thermally conductive material, the optoelectronic component defining an optical axis substantially parallel the component mounting surface, a dielectric layer (106) formed on the conductive substrate (100), where the conductive layer and the dielectric layer define a bondline thickness, and an optical block (108) fixedly positioned on the dielectric layer, defining an optical axis substantially parallel with the component mounting surface and the bondline thickness selected to align the optical axis of the optical block to the optical axis of the optoelectronic component. Palanisamy et al. does not

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describe a conductive layer positioned on the component mounting surface adjacent the thermally conductive material.

5. U.S. Patent No. 6,713,862 to Palanisamy et al. remains the closest prior art of record in this application. For the reasons stated above, however, Claims 1-17 herein are deemed to patentably distinguish over Palanisamy et al. and all other prior art of record.

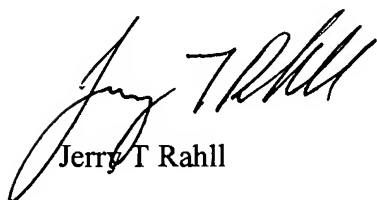
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents Nos. 5,537,502 and 6,345,138 describe optical components in alignment having thermal conductive layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry T. Rahll



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